Contents

VOLUME 13, ISSUE Nos. 1–16

Yeast

ISSUE No. 1 JANUARY 1997

Yeast *PIG* Genes: *PIG1* Encodes a Putative Type 1 Phosphatase Subunit that Interacts with the Yeast Glycogen Synthase Gsy2p*
C. Cheng, D. Huang and P. J. Roach 1

The C-terminal Domain of Snf3p is Sufficient to Complement the Growth Defect of *snf3* Null Mutations in *Saccharomyces cervisiae*: *SNF3* Functions in Glucose Recognition
D. M. Coons, P. Vagnoli and L. F. Bisson 9

Galactose-inducible Expression Systems in *Candida maltosa* using Promoters of Newly-isolated *GAL1* and *GAL10* Genes
S. M. Park, M. Ohkuma, Y. Masuda, A. Ohta and M. Takagi 21

Characterization of the *Rad14-2* Mutant of *Saccharomyces cerevisiae*: Implications for the Recognition of UV Photoproducts by the Rad14 Protein
G. W. Jones, S. H. Reed and R. Waters 31

YEAST FUNCTIONAL ANALYSIS REPORTS

Identification and Expression of the *Saccharomyces cerevisiae* Cytoplasmic Tryptophanyl-tRNA Synthetase Gene
T. R. John, M. Ghosh and J. D. Johnson 37

Multidrug-Resistant Transport Proteins in Yeast: Complete Inventory and Phylogenetic Characterization of Yeast Open Reading Frames within the Major Facilitator Superfamily
A. Goffeau, J. Park, I. T. Paulsen, J.-L. Jonniaux, T. Dinh, P. Mordant and M. H. Saier, Jr. 43

YEAST SEQUENCING REPORTS

Sequencing of a 40·5 kb Fragment Located on the Left Arm of Chromosome VII from *Saccharomyces cerevisiae*
M. Coglievina, R. Klima, I. Bertani, D. Delneri, P. Zaccaria and C. V. Bruschi 55

The Sequence of a 36·7 kb Segment on the Left Arm of Chromosome IV from *Saccharomyces cerevisiae* Reveals 20 Non-overlapping Open Reading Frames (ORFs) Including *SIT4, FAD1, NAM1, RNA11, SIR2, NAT1, PRP9, ACT2* and *MPS1* and 11 New ORFs
A.-M. Sarén, P. Laamanen, J. B. Lejarcegui and L. Paulin 65

Analysis of a 35·6 kb Region on the Right Arm of *Saccharomyces cerevisiae* Chromosome XV
R. Bordonné, A. Camasses, A. Madania, O. Poch, I. Tarassov, B. Winsor and R. Martin 73

The Genes Encoding the Transcription Factor yTAF$_{II}$60, the G4p1 Protein and a Putative Glucose Transporter are Contained in a 12·3 kb DNA Fragment on the Left Arm of *Saccharomyces cerevisiae* Chromosome VII
S. Paoluzi, O. Minenkova and L. Castagnoli 85

CURRENT AWARENESS ON YEAST 93

ISSUE No. 2 FEBRUARY 1997

Determination of the Relative Ploidy in Different *Saccharomyces cerevisiae* Strains Used for Fermentation and 'Flor' Film Ageing of Dry Sherry-type Wines
S. Guijo, J. C. Mauricio, J. M. Salmon and J. M. Ortega 101

The Fate of Glucose in Strains S288C and S173-6B of the Yeast *Saccharomyces cerevisiae*
S. M. Pedler, P. G. Wallace, J. C. Wallace and M. N. Berry 119

Expression of the *SUC2* Gene of *Saccharomyces cerevisiae* is Induced by Low Levels of Glucose
S. Özcan, L. G. Vallier, J. S. Flick, M. Carlson and M. Johnston 127

The Essential *Schizosaccharomyces pombe gpi1*⁺ Gene Complements a Bakers' Yeast GPI Anchoring Mutant and is Required for Efficient Cell Separation
P. A. Colussi and P. Orlean 139

Histone H1 in *Saccharomyces cerevisiae*
S. C. Ushinsky, H. Bussey, A. A. Ahmed, Y. Wang, J. Friesen, B. A. Williams and R. K. Storms 151

YEAST SEQUENCING REPORTS

The Nucleotide Sequence of a 39 kb Segment of Yeast Chromosome IV: 12 New Open Reading Frames, Nine Known Genes and One Gene for Gly-tRNA
A. Bahr, S. Möller-Rieker, T. Hankeln, C. Kraemer, U. Protin and E. R. Schmidt 163

An 18·3 kb DNA Fragment from Yeast Chromosome VII Carries Four Unknown Open Reading Frames, the Gene for an Asn Synthetase, Remnants of Ty and Three tRNA Genes
L. Van Dyck, H. Tettelin, B. Purnelle and A. Goffeau 171

The Sequence of a Nearly Unclonable 22·8 kb Segment on the Left Arm of Chromosome VII from *Saccharomyces cerevisiae* Reveals *ARO2*, *RPL9A*, *TIP1*, *MRF1* Genes and Six New Open Reading Frames
M. Voet, E. Defoor, P. Verhasselt, L. Riles, J. Robben and G. Volckaert 177

The Sequence of 32 kb on the Left Arm of Yeast Chromosome XII Reveals Six Known Genes, a New Member of the Seripauperins Family and a New ABC Transporter Homologous to the Human Multidrug Resistance Protein
B. Purnelle and A. Goffeau 183

CORRIGENDUM 189

CALENDAR 190

CURRENT AWARENESS ON YEAST 191

ISSUE No. 3, 15 MARCH 1997

Multiple Copies of *PBS2*, *MHP1* or *LRE1* Produce Glucanase Resistance and Other Cell Wall Effects in *Saccharomyces cerevisiae*
M. H. Lai, S. J. Silverman, J. P. Gaughran and D. R. Kirsch 199

Properties and Heterologous Expression of the Glucose Transporter *GHT1* from *Schizosaccharomyces pombe*
H. Lichtenberg-Fraté, T. Näschen, S. Heiland and M. Höfer 215

Predacious Yeasts
M. Lachance and W.-M. Pang 225

YEAST FUNCTIONAL ANALYSIS REPORTS

Rapid Amplification of Uncharacterized Transposon-tagged DNA Sequences from Genomic DNA
K. T. Chun, H. J. Edenberg, M. R. Kelley and M. G. Goebl 233

YEAST SEQUENCING REPORTS

Sequence Analysis of a 37·6 kbp Cosmid Clone from the Right Arm of *Saccharomyces cerevisiae* Chromosome XII, Carrying *YAP3*, *HOG1*, *SNR6*, tRNA-Arg3 and 23 New Open Reading Frames, Among Which Several Homologies to Proteins Involved in Cell Division Control and to Mammalian Growth Factors and Other Animal Proteins are Found
P. Verhasselt and G. Volckaert 241

Sequence Analysis of a Near-subtelomeric 35·4 kb DNA Segment on the Right Arm of Chromosome VII from *Saccharomyces cerevisiae* Carrying the *MAL1* Locus Reveals 15 Complete Open Reading Frames, Including *ZUO1*, *BGL2* and *BIO2* Genes and an ABC Transporter Gene
G. Volckaert, M. Voet and J. Robben 251

The DNA Sequence of Cosmid 14-13b from Chromosome XIV of *Saccharomyces cerevisiae* Reveals an Unusually High Number of Overlapping Open Reading Frames
A. De Antoni, M. D'Angelo, F. Dal Pero, F. Sartorello, D. Pandolfo, A. Pallavicini, G. Lanfranchi and G. Valle 261

Completion of the *Saccharomyces cerevisiae* Genome Sequence Allows Identification of *KTR5*, *KTR6* and *KTR7* and Definition of the Nine-Membered *KRE2/MNT1* Mannosyltransferase Gene Family in this Organism
M. Lussier, A. Sdicu, E. Winnett, D. H. Vo, J. Sheraton, A. Düsterhöft, R. K. Storms and H. Bussey 267

Sequencing of a 9·9 kb Segment on the Right Arm of Yeast Chromosome V11 Reveals Four Open Reading Frames, Including *PFK1*, the Gene Coding for Succinyl-CoA Synthetase (β-chain) and Two ORFs Sharing Homology with ORFs of the Yeast Chromosome VIII
P. Guerreiro, D. Azevedo, T. Barreiros and C. Rodrigues-Pousada 275

Analysis of the DNA Sequence of a 34 038 bp Region on the Left Arm of Yeast Chromosome XV
M. R. Rad, B. Habbig, G. Jansen, U. Hattenhorst, M. Kroll and C. P. Hollenberg 281

Analysis of an 11·6 kb Region from the Right Arm of Chromosome VII of *Saccharomyces cerevisiae* Between the *RAD2* and the *MES1* Genes Reveals the Presence of Three New Genes
M. L. Clemente, G. Sartori, B. Cardazzo and G. Carignani 287

CURRENT AWARENESS ON YEAST 291

ISSUE No. 4, 30 MARCH 1997

Serine Palmitoyltransferase (*scs1/lcb2*) Mutants have Elevated Copy Number of the L-A dsRNA Virus
V. R. Garnepudi, C. Zhao, T. Beeler and T. Dunn 299

***Saccharomyces cerevisiae* Cell Lysis Mutations *cly5* and *cly7* Define Temperature-Sensitive Alleles of *PKC1*, the Gene Encoding Yeast Protein Kinase C**
J. Baymiller and J. E. McCullough 305

Analysis of the Structure of a Natural Alternating d(TA)$_n$ Sequence in Yeast Chromatin
A. Aranda, J. E. Pérez-Ortín, C. J. Benham and M. del Osmo 313

Cloning and Expression of Two Chitin Deacetylase Genes of *Saccharomyces cerevisiae*
C. Mishra, C. E. Semino, K. J. McCreath, H. de la Vega, B. J. Jones, C. A. Specht and P. W. Robbins 327

Enhancement of Protein Secretion in *Saccharomyces cerevisiae* by Overproduction of Sso Protein, a Late-Acting Component of the Secretory Machinery
L. Ruohonen, J. Toikkanen, M. Outola, H. Söderlund and S. Keränen 337

YEAST FUNCTIONAL ANALYSIS REPORTS

Construction of a Yeast Strain Deleted for the *TRP1* Promotor and Coding Region that Enhances the Efficiency of the Polymerase Chain Reaction-Disruption Method
A. Baudin-Baillieu, E. Guillemet, C. Cullin and F. Lacroute 353

YEAST SEQUENCING REPORTS

DNA Sequence Analysis of a 23 002 bp DNA Fragment of the Right Arm of *Saccharomyces cerevisiae* Chromosome VII
J. Arroyo, M. García-Gonzalez, M. I. García-Saez, M. Sanchez and C. Nombela 357

The Sequence of a 8 kb Segment on the Right Arm of Yeast Chromosome VII Identifies Four New Open Reading Frames and the Gene for YTAF$_{II}$145
M. Ruzzi, A. Marconi, M. Saliola, L. Fabiani, F. Montebove and L. Frontali 365

Sequence Analysis of a 10·5 kb DNA Fragment from the Yeast Chromosome VII Reveals the Presence of Three New Open Reading Frames and of a tRNA^{Thr} Gene
C. Mazzoni, M. Ruzzi, T. Rinaldi, F. Solinas, F. Montebove and L. Frontali 369

Analysis of a 17·9 kb Region from the *Saccharomyces cerevisiae* Chromosome VII Reveals the Presence of Eight Open Reading Frames, Including *BRF1* (TFIIIB70) and *GCN5* Genes
F. Feroli, G. Carignani, A. Pavanello, P. Guerreiro, D. Azevedo, C. Rodrigues-Pousada, P. Melchioretto, L. Panzeri and M. L. A. Carbone 373

The Sequence of a 54·7 kb Fragment of Yeast Chromosome XV Reveals the Presence of two tRNAs and 24 New Open Reading Frames
M. Valens, C. Bohn, B. Daignan-Fornier, V.-D. Dang and M. Bolotin-Fukuhara 379

Identification of Gene Encoding a Putative RNA-Helicase, Homologous to SKI2, in Chromosome VII of *Saccharomyces cerevisiae*
E. Martegani, M. Vanoni, I. Mauri, S. Rudoni, M. Saliola and L. Alberghina 391

ISSUE No. 5, APRIL 1997

Review: An Overview of the *Saccharomyces cerevisiae* Microtubule and Microfilament Cytoskeleton
B. Winsor and E. Schiebel 399

The Branched-Chain Amino Acid Permease Gene of *Saccharomyces cerevisiae*, *BAP2*, Encodes the High-Affinity Leucine Permease (S1)
J. Schreve and J. M. Garrett 435

Meiotic Inheritance of Functional *GAL80^a* Gene Product in *Saccharomyces cerevisiae*
A. D. Keller and E. T. Young 441

A Conditional Sterol Esterification Defect in Yeast Having Either a *sec1* or *sec5* Mutation in the Secretory Pathway
M. E. Tomeo, L. M. Palermo, S. Tove and L. W. Parks 449

YEAST SEQUENCING REPORTS

Isolation of a *Schizosaccharomyces pombe* Gene Which in High Copy Confers Resistance to the Nucleoside Analogue 5-Azacytidine
G. M. Platt and C. Price 463

Analysis of a 21·7 kb DNA Sequence from the Left Arm of Chromosome VII Reveals 11 Open Reading Frames: Two Correspond to New Genes
M. Feuermann, L. Simeonova, J.-L. Souciet and S. Potier 475

Sequence and Analysis of a 36·2 kb Fragment from the Right Arm of Yeast Chromosome XV Reveals 19 Open Reading Frames Including *SNF2*(5′ end), *CPA1*, *SLY41*, a Putative Transport ATPase, a Putative Ribosomal Protein and an *SNF2* Homologue
R. Poirey, C. Cziepluch, E. Tobiasch, A. Pujol, E. Kordes and J.-C. Jauniaux 479

Sequencing Analysis of a 36·8 kb Fragment of Yeast Chromosome XV Reveals 26 Open Reading Frames Including *SEC63*, *CDC31*, *SUG2*, *GCD1*, *RBL2*, *PNT1*, *PAC1* and *VPH1*
R. Poirey and J.-C. Jauniaux 483

YEAST MAPPING REPORT

The *RAD29* Gene: Map Position on the Right Arm of Chromosome II
S. A. Kozhina, T. H. Kozhina and V. G. Korolev 489

CURRENT AWARENESS ON YEAST 491

SPECIAL CONFERENCE ISSUE, APRIL 1997

Eighteenth International Conference on Yeast Genetics and Molecular Biology, Stellenbosch, South Africa, 31 March–5 April 1997 ..... S1–S274

ISSUE No. 6 MAY 1997

***Yarrowia lipolytica SRP54* homolog and Translocation of Kar2p**
I. H. Lee and D. M. Ogrydziak 499

Mechanisms of Salt Tolerance Conferred by Overexpression of the *HAL1* Gene in *Saccharomyces cerevisiae*
G. Rios, A. Ferrando and R. Serrano 515

The Osmotic Hypersensitivity of the yeast *Saccharomyces cerevisiae* is Strain and Growth Media Dependent: Quantitative Aspects of the Phenomenon
A. Blomberg 529

Role of the Cytoskeleton in Endocytosis of the Yeast Maltose Transporter
E. Peñalver, L. Ojeda, E. Moreno and R. Lagunas 541

Expression Cassettes for Formaldehyde and Fluoroacetate Resistance, Two Dominant Markers in *Saccharomyces cerevisiae*
M. A. van den Berg and H. Y. Steensma 551

Characterization of the *Saccharomyces cerevisiae cdc42*-1^{ts} Allele and New Temperature-Conditional-Lethal *cdc42* Alleles
P. J. Miller and D. I. Johnson 561

YEAST FUNCTIONAL ANALYSIS REPORTS

Phylogenetic Classification of the Mitochondrial Carrier Family of *Saccharomyces cerevisiae*
B. El Moulaij, C. Duyckaerts, J. Lamotte-Brasseur and F. E. Sluse 573

YEAST SEQUENCING REPORTS

Sequence Analysis of a 33·2 kb Segment from the Left Arm of Yeast Chromosome XV Reveals Eight Known Genes and Ten New Open Reading Frames Including Homologues of ABC Transporters, Inositol Phosphatases and Human Expressed Sequence Tags
M. Tzermia, C. Katsoulou and D. Alexandraki 583

CURRENT AWARENESS ON YEAST 591

ISSUE No. 7, 15 JUNE 1997

Reconstitution of the NF-κB System in *Saccharomyces cerevisiae* for Isolation of Effectors by Phenotype Modulation
J.-C. Epinat, S. T. Whiteside, N. R. Rice and A. Israël 599

The Linear Plasmid pDHL1 from *Debaryomyces hansenii* Encodes a Protein Highly Homologous to the pGKL1-Plasmid DNA Polymerase
K. Fukuda, M. Maebuchi, H. Takata and N. Gunge 613

The *AFT1* Transcriptional Factor is Differentially Required for Expression of High-Affinity Iron Uptake Genes in *Saccharomyces cerevisiae*
C. Casas, M. Aldea, C. Espinet, C. Gallego, R. Gil and E. Herrero 621

Sequence Comparison of the Ty1 and Ty2 Elements of the Yeast Genome Supports the Structural Model of the $tRNA_i^{Met}$-Ty1 RNA Reverse Transcription Initiation Complex
S. Friant, T. Heyman, O. Poch, M. Wilhelm and F. X. Wilhelm 639

YEAST FUNCTIONAL ANALYSIS REPORTS

'Marker Swap' Plasmids: Convenient Tools for Budding Yeast Molecular Genetics
F. R. Cross 647

YEAST SEQUENCING REPORTS

DNA Sequencing and Analysis of 130 kb from Yeast Chromosome XV
H. Voss, V. Benes, M. A. Andrade, A. Valencia, S. Rechmann, C. Teodoru, C. Schwager, V. Paces, C. Sander and W. Ansorge 655

Sequence Analysis of *Candida albicans* Phosphoribosyl-aminoimidazole Carboxylase (*ADE2*) Gene
P. W.-K. Tsang, B.-Y. Cao and J. Wang 673

Molecular Cloning of a *Candida albicans* Gene (*SSB1*) Coding for a Protein Related to the Hsp70 Family
V. Maneu, A. M. Cervera, J. P. Martinez and D. Gozalbo 677

CURRENT AWARENESS ON YEAST 683

ISSUE No. 8, 30 JUNE 1997

***BTN1*, A yeast Gene Corresponding to the Human Gene Responsible for Batten's Disease, is Not Essential for Viability, Mitochondrial Function, or Degradation of Mitochondrial ATP Synthase**
D. A. Pearce and F. Sherman 691

Secretion of Mouse α-Amylase from *Kluyveromyces lactis*
M. Tokunaga, M. Ishibashi, D. Tatsuda and H. Tokunaga 699

Deregulation of *CLN1* and *CLN2* in the *Saccharomyces cerevisiae whi2* Mutant
P. Radcliffe, J. Trevethick, M. Tyers and P. Sudbery 707

Constitutive Flocculation in *Saccharomyces cerevisiae* Through Overexpression of the *GTS1* Gene, Coding for a 'Glo'-type Zn-finger-containing Protein
P. Bossier, P. Goethals and C. Rodrigues-Pousada 717

Identification and Preliminary Characterization of p31, a new PSTAIRE-related Protein in Fission Yeast
S. Tournier, Y. Gachet and J. S. Hyams 727

Characterization of the Checkpoint Gene *RAD53/MEC2* in *Saccharomyces cerevisiae*
S. Kim and T. A. Weinert 735

Cloning of the Multicopy Suppressor Gene *SUR7*: Evidence for a Functional Relationship between the Yeast Actin-binding Protein Rvs167 and a Putative Membranous Protein
P. Sivadon, M.-F. Peypouquet, F. Doignon, M. Aigle and M. Crouzet 747

YEAST FUNCTIONAL ANALYSIS REPORTS

Applications of the Long and Accurate Polymerase Chain Reaction Method in Yeast Molecular Biology: Direct Sequencing of the Amplified DNA and Its Introduction into Yeast
Y. Takita, M. Takahara, S. Nogumi, Y. Anraku and Y. Ohya 763

YEAST SEQUENCING REPORTS

Sequence Analysis of the *Candida albicans ADE2* Gene and Physical Separation of the Two Functionally Distinct Domains of the Phosphoribosylaminoimidazole Carboxylase
J. J. Schmuke, V. J. Davisson, S. L. Bonar, K. Gheesling Mullis and S. B. Dotson 769

Cloning and Characterization of the *klDIM1* Gene from *Kluyveromyces lactis* Encoding the m_2^6A Dimethylase of the 18S rRNA
I. Housen, D. Demonté, D. Lafontaine and J. Vandenhaute 777

ISSUE No. 9 JULY 1997

Modulation of Glycerol and Ethanol Yields During Alcoholic Fermentation in *Saccharomyces cerevisiae* Strains Overexpressed or Disrupted for *GPD1* Encoding Glycerol 3-Phosphate Dehydrogenase
S. Michnick, J. Roustan, F. Remize, P. Barre and S. Dequin 783

Characterization of *CHS4(CAL2)*, A Gene of *Saccharomyces cerevisiae* Involved in Chitin Biosynthesis and Allelic to *SKT5* and *CSD4*
J. A. Trilla, T. Cos, A. Duran and C. Roncero 795

Characterization of Two New Genes Down-regulated by α-factor
J. Seidel and W. Tanner 809

Isolation of Three Contiguous Genes, *ACR1*, *ACR2* and *ACR3*, Involved in Resistance to Arsenic Compounds in the Yeast *Saccharomyces cerevisiae*
P. Bobrowicz, R. Wysocki, G. Owsianik, A. Goffeau and S. Ułaszewski 819

Cloning, Sequencing and Expression of a Full-Length cDNA copy of the M1 Double-Stranded RNA Virus from the Yeast, *Saccharomyces cerevisiae*
P. J. Russell, A. M. Bennett, Z. Love and D. M. Baggott 829

YEAST FUNCTIONAL ANALYSIS REPORTS

A Set of Vectors with a Tetracycline-Regulatable Promoter System for Modulated Gene Expression in *Saccharomyces cerevisiae*
E. Gari, L. Piedrafita, M. Aldea and E. Herrero 837

YEAST SEQUENCING REPORTS

Sequence Analysis of the 33 kb Long Region Between *ORC5* and *SU11* From the Left Arm of Chromosome XIV from *Saccharomyces cerevisiae*
M. Sen-Gupta, U. Güldener, J. Beinhauer, T. Fiedler and J. H. Hegemann 849

The Characterization of Two New Clusters of Duplicated Genes Suggests a 'Lego' Organization of the Yeast *Saccharomyces cerevisiae* Chromosomes
M. Feuermann, J. de Montigny, S. Potier and J.-L. Souciet 861

Isolation and Characterization of the *Candida albicans PFY1* Gene for Profilin
D. B. Ostrander and J. A. Gorman 871

Obituary: In Memory of Michael Ciriacy
J. Heinisch, C. P. Hollenberg and F. K. Zimmermann 881

CURRENT AWARENESS ON YEAST 883

ISSUE No. 10 AUGUST 1997

The *Saccharomyces cerevisiae* MFS Superfamily *SGE1* Gene Confers Resistance to Cationic Dyes
C. Jacquot, R. Julien and M. Guilloton 891

Stationary-Phase Gene Expression in *Saccharomyces cerevisiae* During Wine Fermentation
C. Riou, J.-M. Nicaud, P. Barre and C. Gaillardin 903

***GCR1*-Dependent Transcriptional Activation of Yeast Retrotransposon Ty2-917**
S. Türkel, X.-B. Liao and P. J. Farabaugh 917

Surface Properties of Top- and Bottom-Fermenting Yeast
P. B. Dengis and P. G. Rouxhet 931

Phytopathogenic Filamentous (Ashbya, Eremothecium) and Dimorphic Fungi (Holleya, Nematospora) with Needle-shaped Ascospores as New Members Within the Saccharomycetaceae
H. Prillinger, W. Schweigkofler, M. Breitenbach, P. Briza, E. Staudacher, K. Lopandic, O. Molnár, F. Weigang, M. Ibl and A. Ellinger 945

Isolation and Characterization of the *KlHEM1* Gene in *Kluyveromyces lactis*
M. González-Domínguez, C. Méndez-Carro and M. Esperanza Cerdán 961

YEAST FUNCTIONAL ANALYSIS REPORTS

Identification of Genes with Nutrient-controlled Expression by PCR-mapping in the Yeast *Saccharomyces cerevisiae*
M. Crauwels, J. Winderickx, J. H. de Winde and J. M. Thevelein 973

YEAST SEQUENCING REPORTS

Phylogenetic Relationships of Fungal Cytochromes *c*
G. Janbon, E. P. Rustchenko, S. Klug, S. Scherer and F. Sherman 985

CURRENT AWARENESS ON YEAST 991

ISSUE No. 11, 15 SEPTEMBER 1997

Vacuole Segregation in the *Saccharomyces cerevisiae vac2-1* Mutant: Structural and Biochemical Quantification of the Segregation Defect and Formation of New Vacuoles
D. S. Gomes De Mesquita, J. Shaw, J. A. Grimbergen, M. A. Buys, L. Dewi and C. L. Woldringh 999

Accumulation of Misfolded Protein Aggregates Leads to the Formation of Russell Body-like Dilated Endoplasmic Reticulum in Yeast
K. Omebayashi, A. Hirata, R. Fukuda, H. Horiuchi, A. Ohta and M. Takagi 1009

In vivo* Mutational Analysis of Highly Conserved Amino Acid Residues of the Small Subunit Cpalp of the Carbamylphosphate Synthetase of *Saccharomyces cerevisiae
A. Bernard, P. Erbs, P. Demuyter and R. Jund 1021

Two New S-Phase-Specific Genes from *Saccharomyces cerevisiae*
S. Lee, C. Davis, J. B. Konopka and R. Sternglanz 1029

Impairment of Peroxisome Degradation in *Pichia methanolica* Mutants Defective in Acetyl-CoA Synthetase or Isocitrate Lyase
A. R. Kulachkovsky, O. M. Moroz and A. A. Sibirny 1043

Who's Who Among the *Saccharomyces cerevisiae* Actin-Related Proteins? A Classification and Nomenclature Proposal for a Large Family
O. Poch and B. Winsor 1053

The Effect of a Suppressed *rad52* Mutation on the Suppression of *rad6* by *srs2*
M. M. Nguyen and D. M. Livingston 1059

YEAST FUNCTIONAL ANALYSIS REPORTS

Heterologous *HIS3* Marker and GFP Reporter Modules for PCR-Targeting in *Saccharomyces cerevisiae*
A. Wach, A. Brachat, C. Alberti-Segui, C. Rebischung and P. Philippsen 1065

YEAST SEQUENCING REPORTS

Sequence Analysis of 203 Kilobases from *Saccharomyces cerevisiae* Chromosome VII
M. Rieger, M. Brückner, M. Schäfer and S. Müller-Auer 1077

CURRENT AWARENESS ON YEAST 1091

ISSUE No. 12, 30 SEPTEMBER 1997

A Review of Phenotypes in *Saccharomyces cerevisiae*
M. Hampsey 1099

Tandemly Repeated 147 bp Elements Cause Structural and Functional Variation in Divergent *MAL* Promoters of *Saccharomyces cerevisiae*
P. J. L. Bell, V. J. Higgins, I. W. Dawes and P. H. Bissinger 1135

Specific Labelling of Cell Wall Proteins by Biotinylation. Identification of Four Covalently linked O-mannosylated proteins of *Saccharomyces cerevisiae*
V. Mrsâ, T. Seidl, M. Gentzsh and W. Tanner 1145

Ribosomal Protein L9 is the Product of *GRC5*, Homolog of the Putative Tumor Suppressor QM in *S. cerevisiae*
J. Nika, F. L. Erickson and E. M. Hannig 1155

Advancement through Mitosis Requires *rae1* Gene Function in Fission Yeast
W. A. Whalen, A. Bharathi, D. Danielewicz and R. Dhar 1167

YEAST FUNCTIONAL ANALYSIS REPORTS

Disruption of Six Novel Yeast Genes Reveals Three Genes Essential for Vegetative Growth and One Required for Growth at Low Temperature
M.-E. Huang, E. Cadieu, J.-L. Souciet and F. Galibert 1181

YEAST MAPPING REPORTS

Mapping of *ure1*, *ure2*, and *ure3* Markers in Fission Yeast
M. W. Lubbers, R. J. Thornton and N. K. Honey 1195

ISSUE No. 13 OCTOBER 1997

Characterization and Regulation of the Genes Encoding Ribosomal Proteins L39 and S7 of the Human Pathogen *Candida albicans*
S. Delbrück, A. Sonneborn, M. Gerads, A. H. Grablowitz and J. F. Ernst 1199

Inducible Membranes in Yeast: Relation to the Unfolded-Protein-Response Pathway
R. Menzel, F. Vogel, E. Kargel and W.-H. Schunck 1211

Molecular Characterization of the Glyceraldehyde-3-phosphate Dehydrogenase Gene of *Phaffia rhodozyma*
J. C. Verdoes, J. Wery, T. Boekhout and A. J. J. van Ooyen 1231

A Phylogenetic Analysis of *Saccharomyces* Species by the Sequence of 18S-28Sr rRNA Spacer Regions
Y. Oda, M. Yabuki, K. Tonomura and M. Fukunaga 1243

Molecular Cloning of Chromosome I DNA from *Saccharomyces cerevisiae*: Characterization of the 54-kb Right Terminal *CDC15-FLO1-PHO11* Region
A. B. Barton, H. Bussey, R. K. Storms and D. B. Kaback 1251

Transcriptional Regulation of *SUP35* and *SUP45* in *Saccharomyces cerevisiae*
A. Dagkessamanskaya, M. Ter-Avanesyan and W. H. Mager 1265

YEAST FUNCTIONAL ANALYSIS REPORTS

Expression Profiles of Transcripts from 126 Open Reading Frames in the Entire Chromosome VI of *Saccharomyces cerevisiae* by Systematic Northern Analyses
M. Naitou, H. Hagiwara, F. Hanaoka, T. Eki and Y. Murakami 1275

CURRENT AWARENESS ON YEAST 1291

ISSUE No. 14 NOVEMBER 1997

The Homeodomain Protein Pho2p Binds at an A/T-Rich Segment Flanking the Binding Site of the Basic-Helix-Loop-Helix Protein Pho4p in the Yeast *PHO* Promoters
J. P. V. Magbanua, K. Fujisawa, N. Ogawa and Y. Oshima 1299

Purification and Characterization of Phosphofructokinase from the Yeast *Kluyveromyces lactis*
J. Bär, W. Schellenberger and G. Kopperschläger 1309

The *ALD6* Gene of *Saccharomyces cerevisiae* Encodes a Cytosolic, Mg^{2+}-Activated Acetaldehyde Dehydrogenase
P. G. Meaden, F. M. Dickinson, A. Mifsud, W. Tessier, J. Westwater, H. Bussey and M. Midgley 1319

Measurement of Nuclear DNA Content in Fission Yeast by Flow Cytometry
C. R. Carlson, B. Grallert, R. Bernander, T. Stokke and E. Boye 1329

Lys80p of *Saccharomyces cerevisiae*, Previously Proposed as a Specific Repressor of *LYS* Genes, is a Pleiotropic Regulatory Factor Identical to Mks1p
A. Feller, F. Ramos, A. Piérard and E. Dubois 1337

YEAST FUNCTIONAL ANALYSIS REPORTS

A Rapid and Reliable Method for Metabolite Extraction in Yeast using Boiling Buffered Ethanol
B. Gonzalez, J. François and M. Renaud 1347

Functional Differences Among the Six *Saccharomyces cerevisiae* $tRNA^{Trp}$ Genes
W.-C. Ong, M. Ibrahim, M. Town and J. D. Johnson 1357

Characterization of New Proteins Found by Analysis of Short Open Reading Frames from the Full Yeast Genome
M. A. Andrade, A. Daruvar, G. Casari, R. Schneider, M. Termier and C. Sander 1363

YEAST SEQUENCING REPORTS

Isolation of a Putative Prolyl-tRNA Synthetase (*CaPRS*) Gene from *Candida albicans*
M. Sentandreu, M. V. Elorza and R. Sentandreu 1375

Isolation and Sequence of the Gene Encoding Ornithine Decarboxylase, *SPE1*, from *Candida albicans* by Complementation of a *spe1*Δ Strain of *Saccharomyces cerevisiae*
M. D. McNemar, J. A. Gorman and H. R. Buckley 1383

CURRENT AWARENESS ON YEAST 1391

ISSUE No. 15 DECEMBER 1997

Molecular Cloning of *TvDAO1*, a Gene Encoding a D-Amino Acid Oxidase from *Trigonopsis variabilis* and its Expression in *Saccharomyces cerevisiae* and *Kluyveromyces lactis*
F. J. González, J. Montes, F. Martín, M. Carmen López, E. Fermiñán, J. Catalán, M. A. Galán and A. Domínguez 1399

Saccharomyces carlsbergensis* Contains Two Functional Genes Encoding the Acyl-CoA Binding Protein, One Similar to the *ACB1* Gene from *S. cerevisiae* and one Identical to the *ACB1* Gene from *S. monacensis
C. Børsting, R. Hummel, E. R. Schultz, T. M. Rose, M. B. Pedersen, J. Knudsen and K. Kristiansen 1409

***Saccharomyces cerevisiae* Mutants Altered in Vacuole Function Are Defective in Copper Detoxification and Iron-Responsive Gene Transcription**
M. S. Szczypka, Z. Zhu, P. Silar and D. J. Thiele 1423

Deviant Pex3p Levels Affect Normal Peroxisome Formation in *Hansenula polymorpha*: High Steady-state Levels of the Protein Fully Abolish Matrix Protein Import
R. J. S. Baerends, F. A. Salomons, K. N. Faber, J. A. K. W. Kiel, I. J. van der Klei and M. Veenhuis 1437

Deviant Pex3p Levels Affect Normal Peroxisome Formation in *Hansenula polymorpha*: A Sharp Increase of the Protein Level Induces the Proliferation of Numerous, Small Protein-import Competent Peroxisomes
R. J. S. Baerends, F. A. Salomons, J. A. K. W. Kiel, I. J. van der Klei and M. Veenhuis 1449

Identification of the Gene Encoding scHe1I, a DNA Helicase from *Saccharomyces cerevisiae*
D. W. Bean and S. W. Matson 1465

YEAST FUNCTIONAL ANALYSIS REPORTS

In silico* Identification of Glycosyl-Phosphatidylinositol-Anchored Plasma-Membrane and Cell Wall Proteins of *Saccharomyces cerevisiae
L. H. P. Caro, H. Tettelin, J. H. Vossen, A. F. J. Ram, H. van den Ende and F. M. Klis 1477

CURRENT AWARENESS ON YEAST 1491

CALENDAR 1499

ISSUE No. 16, YEAST 1997, DECEMBER 1997

Publisher's Note v

List of Referees vi

GUEST EDITORIAL

1997 Ushers in an Era of Yeast Functional Genomics
H. Bussey 1501

REVIEW

Regulation of Ribosome Synthesis in Yeast
R. J. Planta 1505

YEAST FUNCTIONAL ANALYSIS REPORTS

Two-dimensional Electrophoretic Separation of Yeast Proteins using a Non-linear Wide Range (pH 3–10) Immobilized pH Gradient in the First Dimension; Reproducibility and Evidence for Isoelectric Focusing of Alkaline (pI>7) Proteins
J. Norbeck and A. Blomberg 1519

Green Fluorescent Protein as a Reporter for the DNA Damage-induced Gene *RAD54* in *Saccharomyces cerevisiae*
R. M. Walmsley, N. Billinton and W.-D. Heyer 1535

Large-scale Phenotypic Analysis — The Pilot Project on Yeast Chromosome III
K.-J. Rieger, A. Kaniak, J.-Y. Coppée, G. Aljinovic, A. Baudin-Baillieu, G. Orlowska, R. Gromadka, O. Groudinsky, J.-P. di Rago and P. P. Slonimski 1547

Suitability of Replacement Markers for Functional Analysis Studies in *Saccharomyces cerevisiae*
F. Baganz, A. Hayes, D. Marren, D. C. J. Gardner and S. G. Oliver 1563

Author Index 1575

Keyword Index 1579